

Claims

- 5 1. A method for separation of a fluid, in particular oil, gas and water, in connection
with the extraction of such a fluid from formations under the surface of the earth
or the sea bed, in which the fluid is transported in a supply pipe or transport pipe
(4) to a separator (1) in the form of a tubular separator body, a gravitation tank or
similar, and where the separated components, water and oil, are passed out of
the separator separately via outlet pipes (not shown),
10 characterised in that
the fluid upstream of the separator (1) is subjected to shear forces so that the
drops in the supply flow are torn up to form drops that are so small that the
interface generally becomes new and “uncontaminated” by surfactants.

15 2. A method in accordance with claim 1,
characterised in that
the shear forces are supplied by means of a phase inversion device (6) in the
form of a valve or similar.

20 3. A method in accordance with claims 1 and 2,
characterised in that
the upstream phase inversion device (6) has water supplied to it via a supply pipe
(5) to the fluid.

25 4. A method in accordance with claims 1-3,
characterised in that
de-emulsifier is added before or after the phase inversion device (6) to prevent
the phase-inverted fluid from inverting back to oil-continuous fluid.

5. A device for separation of a fluid, in particular oil, gas and water, in connection with the extraction of such a fluid from formations under the surface of the earth or the sea bed, in which the fluid is transported in a supply pipe or transport pipe
5 (4) to a separator (1) in the form of a tubular separator body, a gravitation tank or similar, and where the separated components, water and oil, are passed out of the separator separately via outlet pipes (not shown),

characterised in that

10 a phase inversion device (6) in the form of a valve or similar is arranged in the transport pipe (4) upstream of the separator (1).

6. A device in accordance with claim 5,

characterised in that

15 a pipe (5) is connected to the transport pipe upstream of the phase inversion device (6) for the addition of water to the fluid.